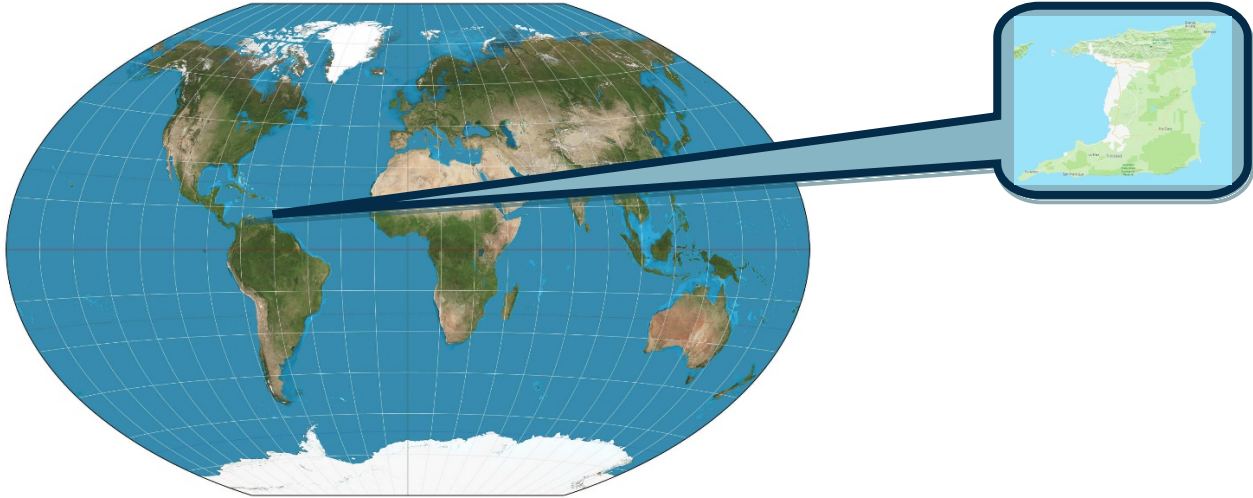


COMBINED CYCLE POWER PLANT **Trinidad & Tobago**
 Post Cleaning Summary 



BACKGROUND:

- 1985 Commissioned
- Natural Gas
- Vertical Gas Flow
- Base Loaded
- No cleaning history
- 2012 June: PIC Deep Cleaning
- 3 Modules Cleaned
- 12 rows largest module

HRSG	GT & Design	Output
<ul style="list-style-type: none"> • ABB • Single wide 	<ul style="list-style-type: none"> • GE Frame Gas Turbine • 1 X 1 	<ul style="list-style-type: none"> • 196 MW Total

ASSESSMENT: HRSG fouling causing issues

- Loss of MW output from design
- Reduced thermal efficiency
- Increased back pressure on gas turbine
- Increased fuel consumption
- Increased stack temperature
- Debris particulates exiting the stack

CLEANING RESULTS: Benefits to the Plant

GT Back Pressure

	Before	After	Change
GT	19"	16"	-3 "

Output

	Before	After	Change
	n/a	n/a	+ 1.5 MW

Stack Temperature

	Before	After	Change
	422 F (216 C)	414 F (212 C)	- 8 F (4 C)